

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0020387 A1 PAQUIER et al.

Jan. 20, 2022 (43) **Pub. Date:**

Publication Classification

(54) INTERRUPT FOR NOISE-CANCELLING AUDIO DEVICES

(71) Applicant: Apple Inc., Cupertino, CA (US)

(72) Inventors: Baptiste P. PAQUIER, Saratoga, CA (US); Aram M. LINDAHL, Menlo Park, CA (US); Adam E. KRIEGEL, Mountain View, CA (US); Kisun YOU, Campbell, CA (US); Sarang S. RANADE, San Jose, CA (US)

(21) Appl. No.: 17/378,634

(22) Filed: Jul. 16, 2021

Related U.S. Application Data

Provisional application No. 63/053,459, filed on Jul. 17, 2020, provisional application No. 63/055,269, filed on Jul. 22, 2020.

(51) Int. Cl. G10L 21/0208 (2006.01)G10L 17/02 (2006.01)G10L 15/08 (2006.01)G06N 20/00 (2006.01)

(52) U.S. Cl.

CPC G10L 21/0208 (2013.01); G10L 17/02 (2013.01); G10L 2015/088 (2013.01); G06N 20/00 (2019.01); G10L 15/08 (2013.01)

(57)ABSTRACT

Implementations of the subject technology provide systems and methods for determining whether to interrupt a user of an audio device that is operating in a noise-cancelling mode of operation. For example, the user may desire to be interrupted by one or more pre-designated contacts that are identified at an associated electronic device as interruptauthorized contacts, or by a person who speaks a designated keyword to the user.

